

determining the position of the second segment of the view relative to the first segment of the view without the aid of positioning information provided by a human operator;

blending the first image with the second image based solely on the content of the images and the determined position of the second segment relative to the first segment to merge the first image and the second image into a panoramic image of the view; and

transmitting the panoramic image over the network.

5. (Amended) A method of merging a set of images, each image representing a corresponding segment of a view, the set including a first image representing a first segment of the view, a second image representing a second segment of the view, and a third image representing a third segment of the view, where the third segment of the view overlaps both the first segment and the second segment of the view, the method comprising;

determining a first relative position of the third segment relative to the first segment of the view by processing the content of the third image and the first image;

determining a first overlap area of the first image and the third image based on the determined first relative position;

determining a second relative position of the third segment relative to the second segment of the view by processing the content of the third image and the second image;

determining a second overlap area of the second image and the third image based on the determined second relative position; and

if the first overlap area is greater than the second overlap area, offsetting the position of the third image relative to the first image and the second image based on the determined first relative position;

otherwise, offsetting the position of the third image relative to the first image and the second image based on the determined second relative position.

7. (Amended) The method of claim 5 further comprising:

determining which of the images is a central one and which are peripheral images; and

using the central image as an initial reference image in correcting perspective distortion in peripheral images.

8. (Amended) The method of claim 7 further comprising:
determining what pair-wise overlap areas exist between the central image and each of the peripheral images; and
selecting as the first peripheral image to have perspective distortion corrected a peripheral image having a maximum pair-wise overlap area with the central image relative to the other peripheral images.

11. (Amended) The method of claim 5, further comprising blending the third image with the first and second image, wherein the blending includes:

dividing the third image into a first portion and a second portion, based on the first relative position; and

compositing the first portion of the third image on the first image at the first position to produce a composite image, the compositing causing the first portion to mask out a part of the first image.

12. (Amended) The method of claim 11 wherein blending the third image with the first and second image further includes:

dividing the second image into a third portion and a second portion, based on a relative position of the second segment of the view relative to the first segment of the view;

dividing the third portion into a fifth portion and a sixth portion, based on the second relative position; and

compositing the fifth portion of the third image on the composite image based on the second relative position to form the panoramic image, the compositing of the fifth portion causing the fifth portion to mask out a part of the composite image.

15. (Amended) An article comprising a computer-readable medium on which are tangibly stored computer-executable instructions for merging images of segments of a view, the stored instructions being operable to cause a computer to:

receive a first image representing a first segment of the view and a second image representing a second segment of the view, the images being received from a remote location over a network;

determine the position of the second segment of the view relative to the first segment of the view without the aid of positioning information provided by a human operator;

blend the first image with the second image based solely on the content of the images and the determined position of the second segment relative to the first segment to merge the first image and the second image into a panoramic image of the view; and

transmit the panoramic image over the network.

20. (Amended) An article comprising a computer-readable medium which stores computer-executable instructions for merging a set of images, each image representing a corresponding segment of a view, the set including a first image representing a first segment of the view, a second image representing a second segment of the view, and a third image representing a third segment of the view, where the third segment of the view overlaps both the first segment and the second segment of the view, the instructions being operable to cause a computer to:

determine a first relative position of the third segment relative to the first segment of the view by processing the content of the third image and the first image;

determine a first overlap area of the first image and the third image based on the determined first relative position;

determine a second relative position of the third segment relative to the second segment of the view by processing the content of third image and the second image;

determine a second overlap area of the second image and third image based on the determined second relative position; and

if the first overlap area is greater than the second overlap area, offset the position of the third image relative to the first image and the second image based on the determined first relative position;

otherwise, offset the third image relative to the first image and the second image based on the determined second relative position.

22. (Amended) The article of claim 21 wherein the stored instructions further comprise instructions operable to cause the computer to:

determine which of the images is a central one and which are peripheral images; and
use the central image as an initial reference image in correcting perspective distortion in
peripheral images.

23. (Amended) The article of claim 21 wherein the stored instructions further comprise
instructions operable to cause the computer to:

determine what pair-wise overlap areas exist between the central image and each of the
peripheral images; and

select as the first peripheral image to be corrected for perspective distortion a peripheral
image having a maximum pair-wise overlap area with the central image relative to the other
peripheral images.

26. (Amended) The article of claim 21 wherein the stored instructions further comprise
instructions operable to cause the computer to blend the third image with the first and second
image, wherein the blending includes:

dividing the third image into a first portion and a second portion, based on the first
position; and

compositing the first portion of the third image on the first image at the first position to
produce a composite image; the compositing causing the first portion to mask out a part of the
first image.

27. (Amended) The article of claim 27 wherein blending the third image with the first
and second image further includes:

dividing the second image into a third portion and a second portion, based on a relative
position of the second segment of the view relative to the first segment of the view;

dividing the third portion into a fifth portion and a sixth portion, based on the second
relative position; and

compositing the fifth portion of the third image on the composite image based on the
second relative position to form the panoramic image, the compositing of the fifth portion
causing the fifth portion to mask out a part of the composite image.

Add the following new claims:

28. The method of claim 1 further comprising:
prior to blending the set of images:
determining which of the images is a central one and which are images; and
using the central image as an initial reference image in correcting perspective
distortion in peripheral images.
29. The method of claim 28 further comprising:
determining what pair-wise overlap areas exist between the central image and each of the
peripheral images; and
selecting as the first peripheral image to have perspective distortion corrected a peripheral
image having a maximum pair-wise overlap area with the central image relative to the other
peripheral images.

In the drawings:

Substitute figures 1-7 with the attached new, formal figures 1-7.